Thomas Jefferson, and none of their actions have been overridden—not yet.

Meanwhile, there are rumblings over the expected shortages of funds for fiscal 1974. The President proposed a \$500 million budget for the National Cancer Institute in 1974, but a memorandum written last November by NCI Director Frank Rauscher and disclosed this week reports that Rauscher needs at least \$640 million "to carry out the objectives the executive and members of Congress have often enunciated."

Reducing the budget below \$640 million, said Rauscher in the memorandum, would restrict clinical trials in immunodiagnosis and immunotherapy, hot new areas of cancer diagnosis and treatment (SN: 5/27/72, p. 341; 6/9/73, p. 367; 6/23/73, p. 408). New cancer drugs would not become available. Industrial contracts to develop equipment to automate Pap smear tests for cervical cancer would have to be postponed. The programs to find viruses or environmental chemicals that trigger cancer would have to be slashed.

In a joint statement this week when releasing Rauscher's memorandum, Sen. Warren Magnuson (D-Wash.), chairman of the Senate Appropriations Subcommittee on Health, and Senate Democratic Leader Mike Mansfield, denounced the President's crash program to conquer cancer as a "fraud on the American people."

The House has approved \$522 million for the 1974 cancer fight. The Senate Appropriations Committee has not yet voted on the bill, but indications are that it will go as high or higher than the House version. If it is, Melvin R. Laird, the chief domestic adviser to the President, says he would recommend a Presidential veto.

## Second Soviet probe heads toward Mars

The Soviets launched Mars 5 last week on the heels of Mars 4 (SN: 7/28/73, p. 55). Both are due to arrive in the vicinity of that planet in mid-February.

The two spacecraft are similar in design. According to Tass, "Simultaneous scientific research by the two stations will make it possible to obtain full data about the planet and the dynamics of physical processes which occur in space." No mention is made of life-detecting instruments on the landers such as those planned for the U.S. Viking landers in 1976.

The Soviets were the first to land a spacecraft on Mars. Mars 3 touched down on the surface during the great dust storm that encompassed the planet in 1971. Signals from the spacecraft were received for only 20 seconds.

## A common problem in an uncommon place

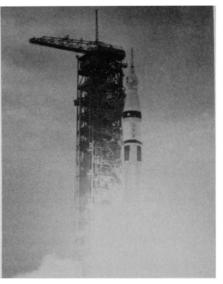
The second crew of Skylab astronauts were struggling this week with a problem that faces many world travelers—motion sickness. Astronauts Alan Bean, Jack Lousma and Owen Garriott were launched on schedule July 28 to meet the orbiting Skylab workshop and begin their planned 59-day stay in weightlessness.

When they arrived at the space station which has been unmanned for over a month, they encountered a variety of minor difficulties. They had trouble finding things the first crew had apparently misplaced. They had an annoying awakening early one morning because of a pressure leak due to an improperly closed door on the trash airlock. They had to mop up water from a leak in one of the tanks. They had a problem with the condensation system which removes water from the cabin air.

They even had some pet problems. An electrical overload caused loss of the system housing mice and vinegar gnats. Space biologists had hoped to learn something about the effects of weightlessness on the animals' biological rhythms. Still intact, however, were the spiders, Arabella and Anita, who will be watched for the web-weaving in weightlessness. And Garriott's minnows were performing as predicted. He reported they were disoriented in their aquarium. "They think they are swimming toward the surface," he said, "and sure enough they are heading straight down."

The minnows weren't the only disoriented ones. The astronauts' motion sickness, which began on their first day in space, did not go away. By their fourth day in weightlessness, they were feeling better, but not up to par. "We certainly don't feel good," Bean reported. "Nobody does."

Lousma had been hit by the motion sickness first, shortly after the spacecraft went into earth orbit. He vomited once Saturday and twice on Sundayan unpleasant experience even on earth and even worse in weightlessness where material floats around. Bean and Garriott also had problems. Space biomedics at the Johnson Space Center (Jsc) in Houston prescribed motion sickness pills and quick head movements to assist the astronauts in adjusting to weightlessness. Both Lousma and Garriott took the pills-a combination of scopolamine and dexedrine that is suppose to block the nerve paths from the inner ear to the stomach. The head movements-30 to 40 per minute, three times a day—stimulate the three semicircular canals in the inner ear and



NASA

Skylab 2 crew off on 59-day stay.



help the body's vestibular adjustment.

While many astronauts have experienced some degree of stomach awareness and motion sickness in space, the prolonged illness of the Skylab 2 crew turned out to be a surprise. None of the three crewmen of Skylab 1 had experienced any sickness at all until they were back on earth, bobbing around in their spacecraft in the Pacific.

"The interesting thing," said W. Ross Hawkins, chief of life sciences at Jsc, "is that all three crewmen are sick. We have never had all three sick on any previous mission that I know of."

Part of the problem could be related to prelaunch activities. This particular crew may not have had a chance to perform as many head exercises. None of the crew took the motion sickness pills before launch as other crews had. Scientifically it would be better not to take the pills to allow scientists to understand how and when the vestibular system finally adapts to weightlessness. But obviously, if the astronauts become ill, it is difficult for them to carry out a normal work day when a quick motion causes nausea. "It's a trade off," Hawkins says. "[The pills] are definitely going to influence the data." The feeling at JSC early this week was that the astronauts would soon be better and that the illnesses will not affect the

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## Train to head EPA: Calls for commitment

President Nixon last week nominated Russell E. Train to replace Acting Administrator Robert Fri as head of the Environmental Protection Agency. Train told a news conference that he hopes to be confirmed by the Senate before the Congressional August recess. Fri returns to private business.

Since 1970, Train has been chairman of the Council on Environ-Quality—the President's chief adviser on environmental matters and the key Administration spokesman on pollution legislation. As chairman, he represented the United States at various international negotiations including those of the U.S.-Soviet joint committee on environmental protection and the International Whaling Commission and at conferences of NATO and the United Nations. Train sought his new job because "we are over the early excitement of getting major legislation on the books," and "we



John H. Douglas Train: Change way we do things.

are now in the implementation phase."

As EPA administrator, Train would become the nation's chief enforcement officer, implementing the environmental legislation he has helped create. "The commitment of the American people is going to be tested," he said. "We are going to have to make some changes in the way we do things."

Promising a "strong, vigorous enforcement policy," Train declined to

say what changes he intends to make in the agency, until after his confirmation hearings. He did, however, say he favored tax incentives to encourage recycling, opposed mass Federal equipment subsidies to control solid waste ("The Administration doesn't want to get into the business of buying garbage trucks") and suggested that EPA's commitment to change Americans' transportation habits would continue.

A man who enjoys the outdoors he just returned to Washington from a fishing trip on the Salmon River— Train first became involved in environmental protection while serving in the United States Tax Court. He resigned the court position to become president of the private Conservation Foundation and later accepted various appointments in environmental matters from Presidents Johnson and Nixon, Train did not formally disclose his recommendation to the President concerning appointment of his chief assistant at EPA, but he reportedly favors the present Deputy Administrator, John Quarles, an old friend.

mission in any substantial way.

Weightlessness does affect the body in other ways to varying degrees. After two weeks back in earth's gravity and atmosphere, for example, the first Skylab crew had not replaced the red blood cells they lost in weightlessness. "We don't know why yet," said Hawkins. It could be related to the loss in muscle tissue the crew experienced in their legs. The loss could also be due to the oxygen atmosphere in the space station. The body may just not need as many red blood cells in that enriched atmosphere. One function of the cells is to transport oxygen.

Because of the nausea, the crew fell behind at least a day in their space station chores. The first spacewalk, originally planned for Tuesday, was postponed at least five days. During that walk, Lousma and Garriott will replace the film in the solar telescopes and emplace a new heat-shield umbrella over the Skylab 1 parasol.

Early Tuesday, Garriott, a solar scientist, felt well enough to want to get down to his business of operating the solar telescopes. "He has been patiently walking back and forth, telling us what we're doing," said Don Puddy, flight director. The ground has been operating the telescopes remotely since the Skylab 1 crew left.

Garriott also made a request that should be familiar to most dads of traveling sons. He asked mission control to telephone his father—collect—to wish him happy birthday.

## Plans to block a future Big Brother

In the 11th century, William the Conqueror inventoried his newly acquired English lands and subjects. The result was the Domesday Book, a title that is still appropriate in view of 20th century fears that have been expressed about the pervasiveness of computerized data collection. From the time a person is born, bits and pieces of personal information are given to different organizations for different reasons. Without the subject's permission or knowledge, all of this information could end up in one data bank. Such an intelligence record or dossier could possibly represent an invasion of privacy or an infringement on civil liberties.

In an attempt to slow down Big Brother's domesday machinery, the Department of Health, Education and Welfare set up an advisory commission to analyze and make recommendations about the harmful consequences that can result from using automated personal data systems. The committee report, "Records, Computers and the Rights of Citizens," was issued this week by HEW Secretary Casper W. Weinberger. He called it "an example of free people, governing themselves, who refuse to submit even to the possibility of technological tyranny."

The report says there must be no personal data record-keeping systems whose very existence is secret, and there

must be a way for an individual to prevent personal information obtained for one purpose from being used or made available for other purposes.

To ensure privacy, it recommends Federal legislation guaranteeing individuals the right to find out what information is being maintained about them in the computerized systems, and to obtain a copy of it on demand. The legislation should allow anyone to contest the accuracy, pertinence and timeliness of any computer-held information. And the report says record-keeping organizations should be required to inform individuals on request of all uses being made of information being kept about them.

The keepers of records have suggested that mistakes could be avoided if every man, woman and child in the United States were given a number or Standard Universal identification (SUI). The HEW commission sees this as a move toward 1984 and says there is no need for such a system. But realizing that a person's Social Security number is a potential SUI, the commission calls for Congressional action giving each individual the right to refuse to disclose his or her Social Security number to any person or organization not authorized by a Federal statute to collect and use it. And those organizations, the commission says, should be prohibited from disclosing the number to others that lack the authority to use it.

The HEW report concludes that many technical difficulties would have